

### REMARKS/ARGUMENTS

Claims 27-30 and 33-50 were pending in the present application. The present response amends claims 27-30 and 39-50, cancels claims 37-38, and adds new claim 51, leaving pending in the application claims 27-30, 33-36, and 39-51. Reconsideration of the rejected claims and consideration of the newly presented claim is respectfully requested.

#### I. Objection to the Disclosure

The prior amendment is objected to under 35 U.S.C. §132(a) as introducing new matter into the disclosure. In particular, the objection relates to the use of the term “substantially similar” in the claims. While Applicants do not necessarily agree that such term adds new matter, as different pieces of material generally will not have precisely the same birefringent properties, the claims have been amended to recite the term “substantially identical.”

The objection also relates to the use of the term “a permutation thereof.” While Applicants do not necessarily agree with the assertion that the specification only gives support for specific thickness ratios (and has given specific arguments against this assertion in previous responses), the term has been removed from the claims. The language in the specification and the claims reciting alternative orderings of these plates makes clear the scope of the claims, such that the language is unnecessary. Applicants therefore respectfully request that the objections to the disclosure be withdrawn.

#### II. Rejection under 35 U.S.C. §112

Claims 27-30 and 33-50 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. In particular, the claims are rejected for using the term “substantially similar.” As discussed above, the term has been removed from the claims and replaced with “substantially identical” when referring to the birefringent properties of the plates. The Office Action states on p. 4 that “only if the materials are of the same material” does the retardance ratio become the thickness ratio, as retardance is a function of thickness and refractive index. Applicants respectfully submit that any plates having substantially the same birefringent properties will function as a depolarizer in such an arrangement, whether or not those plates are of the same material (as it is the birefringent properties that are of importance). Further, different plates of the same material will not have exactly the same birefringent properties, but will have

substantially identical birefringent properties (to within some natural variation). Therefore, the limitation of “substantially identical” should be properly enabled and should not add new matter to the specification. Applicants therefore respectfully request acceptance of the amended language and withdrawal of the rejection with respect to these claims.

### III. Rejection under 35 U.S.C. §103

Claims 27-28 and 33-46 are rejected under 35 U.S.C. §103(a) as being obvious over *Hakimi* (US 5,432,637). Claims 27 and 28 require a depolarizer defined by three birefringent plates, of a specific thickness ratio and having substantially identical birefringent properties, where each of the birefringent plates has a substantially different rotation angle of the respective polarization axis. As discussed in previous office actions, *Hakimi* does not teach or suggest specific thickness ratios. Further, the single Figure in *Hakimi* does not “nearly satisfy” a 1:3:9 thickness ratio as set forth in the office action on page 5.

Further, *Hakimi* does not explicitly disclose “each birefringent plate having a substantially different rotation angle of the respective ordinary axis” as shown by Fig. 1 of *Hakimi* (OA p. 6), as *Hakimi* shows (noting errors in the reference numbering of *Hakimi*) that the second crystal has a principle axis at 45° with respect to the first crystal (col. 4, lines 32-35) but the first and third crystals have the same “principle axis” direction (see Fig. 1). There is no teaching or suggestion in *Hakimi* for all the birefringent plates to have a substantially different rotation angle of the respective polarization axes. As such, *Hakimi* cannot render claims 27 and 28 obvious. Claims 33-36 depend from these claims, and claims 43-46 contain similar limitations, such that these claims also are not rendered obvious. Claims 39-42 depend from claims 29 or 30, which contain allowable subject matter but for the above-addressed matters, now in condition for allowance, such that these claims should also be in condition for allowance.

Claims 47-48 are rejected under 35 U.S.C. §103(a) as being obvious over *Hakimi* in view of the Optics reference (Hecht and Zajac). The Optics reference is cited as teaching that the polarization phase delay of a birefringent crystal is a function of the thickness of that crystal. There is no teaching or suggestion in Optics or *Hakimi*, however, to control the ratio of thicknesses for a plurality of plates in a multi-plate depolarizer. Further, neither reference teaches or suggests ratios as required by claims 47-48. As such, claims 47-48 cannot be rendered

obvious by *Hakimi* and the Optics reference. Applicants therefore respectfully request that the rejection with respect to claims 47-48 be withdrawn.

#### IV. Amendment to the Claims

Unless otherwise specified, amendments to the claims are made for purposes of clarity, and are not intended to alter the scope of the claims or limit any equivalents thereof. The amendments are supported by the specification and do not add new matter to the specification.

#### V. Newly Presented Claims

Claim 51 has been added to cover different aspects of the present invention. This claim recites limitations contained in other existing claims, is supported by the specification, and does not add new matter. Applicants therefore respectfully request consideration of newly presented claim 51.

#### VI. Conclusion

In view of the above, it is respectfully submitted that the application is now in condition for allowance. Reconsideration of the pending claims and a notice of allowance is respectfully requested.

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-1703, under Order No. TTI-30900. **A duplicate copy of the transmittal cover sheet attached to this Response to Office Action Mailed October 14, 2005, is provided herewith.**

Respectfully submitted,

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By:  \_\_\_\_\_

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